11.1

100

100 159

15.0

5

13 1

1sh

10

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 1080.1071/JDH

First Named Inventor or Application Identifier:

Hiroyuki KOSUDA, et al.

Express Mail Label No. (Only for new nonprovisional applications under 37 CFR 1.53(b))

0
1050
0,44
-
10 000
ッ こう 三

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents Box Patent Application Washington, DC 20231

1. [X] Fee Transmittal Form 2. (X) Specification, Claims & Abstract [Total Pages: 33] 3. [X] Drawing(s) (35 USC 113) [Total Sheets: 14] 4. [X] Oath or Declaration [Total Pages: 3] a. [X] Newly executed (original or copy) b. [] Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed) i. [] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 5. [] Incorporation by Reference (usable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein. 6. [] Microfiche Computer Program (Appendix) 7. [] Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. [] Computer Readable Copy b. [] Paper Copy (identical to computer copy) c. [] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

- 8. [X] Assignment Papers (cover sheet & document(s)) 9. [] 37 CFR 3.73(b) Statement (when there is an assignee) [] Power of Attorney 10. [] English Translation Document (if applicable) 11. [1] Information Disclosure Statement (IDS)/PTO-1449 [] Copies of IDS Citations 12. [1] Preliminary Amendment 13. [X] Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 14. [] Small Entity Statement(s) [] Statement filed in prior application, status still proper and desired. 15. [X] Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. [] Other:
- 17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information: [] Continuation [] Divisional [] Continuation-in-part (CIP) of prior application No: ____/_

18. CORRESPONDENCE ADDRESS

STAAS & HALSEY Attn: James D. Halsey, Jr. 700 Eleventh Street, N.W., Suite 500 Washington, DC 20001

Telephone: (202) 434-1500 Facsimile: (202) 434-1501

CONSUMER TRANSACTION FACILITY

BACKGROUND INVENTION

1. Field of the Invention

The present invention relates to a consumer transaction facility preferably applicable to for example, an automatic teller machine (ATM) and a cash dispenser (CD), which are capable of performing banking services such as depositing money in a bank and drawing one's money from the bank.

2. Description of the Related Art

ATMs and the like have come into wide use recently, since those machines permit transactions for receipt of money and payment through no window of a bank and the like or without going to the bank.

According to such an ATM and the like, there is provided such an arrangement that a transaction record of a customer is discharged in the form of a sheet receipt.

However, in case of the sheet receipt, it often happens that after confirmation of the content of the transaction record of the customer, the sheet receipt is thrown away, and there is a possibility that the sheet receipt is lost per se.

On the other hand, there is such a request that the transaction record of the customer is transmitted to a terminal of his house so as to be managed in the form of electronic data.

A technology related to this request is disclosed in Japanese Patent Application Laid-Open Gazette Hei.4-372057 in which there is provided a description that " The present system is to transmit to an arbitrary place such as one's home information as to transactions performed using a banking terminal such as an ATM and the like. A customer performs transactions through the banking terminal such as an ATM and the like, and inputs a FAX number of a destination of information as to the transactions. This information as to the transactions is transmitted by the banking terminal such as an ATM and the like to a host computer and then transmitted by the host computer via a telephone line to an optional place. In the event that a destination address of information is registered onto an account, transactions performed through the account is automatically transmitted.".

However, according to the earlier technology as mentioned above, in the event that a destination address of information is registered onto an account beforehand, contents of the transactions carried out through the

banking terminal such as an ATM and the like are automatically transmitted to a terminal of the destination address of information registered. This is troublesome for the customer as the user of the terminal in the point that transaction information, which is deemed to be unnecessary for the customer, is also transmitted, and in addition this is associated with such a problem that it is expensive since a communication line is necessarily used.

Further, in the event that the conventional banking terminal such as an ATM and the like is used, since the transaction record is always issued in the form of a sheet receipt, except for the case of use of a bankbook, it is troublesome for the customer.

Japanese Patent Application Laid-Open Gazette Hei.4-372057 fails to describe any matter as to a registration treatment of a destination address of information. Thus, it is unclear as to the registration treatment.

SUMMARY OF THE INVENTION

In the light of the aforementioned problems, an object of the present invention is to provide a consumer transaction facility permitting a destination address of a transaction record (transaction information) to

be readily entered on the consumer transaction facility.

It is another object of the present invention to provide a consumer transaction facility capable of prohibiting a transaction record from being issued in the form of a sheet receipt.

It is still another object of the present invention to provide a consumer transaction facility capable of transmitting a transaction record also to a destination address other than the registered destination address.

To attain the above-mentioned objects, according to the present invention, there is provided a consumer transaction facility for communicating with a host computer having a transaction information file for customers via a communication line in accordance with an operation of a customer to perform a customer's desired transaction, said consumer transaction facility comprising: a display device; display control means for controlling a display on said display device; and input means for performing an input operation in accordance with a display on said display device, wherein said display control means performs on said display device a screen display in which a destination electronic mail address for transaction record of a

custom is able to be inputted through said input means, a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the destination electronic mail address, and a screen display in which it is selectable through said input means as to whether the transaction record is to be issued in form of a sheet. This feature makes it possible to readily input the destination address of transaction records on the consumer transaction facility. Further it is possible to prohibit the transaction records from being issued in the form of a sheet in accordance with a user's will.

Further, in the consumer transaction facility as mentioned above, it is acceptable that said display control means performs on said display device a screen display in which a number of transaction records including a new transaction record and past transaction records is able to be inputted through said input means. This feature makes it possible for the user to know one's past transaction records.

Further, to attain the above-mentioned objects, according to the present invention, there is provided a consumer transaction facility for communicating with a host computer having a transaction information file for customers via a communication line in accordance

with an operation of a customer to perform a customer's desired transaction, said consumer transaction facility comprising: a display device; display control means for controlling a display on said display device; input means for performing an input operation in accordance with a display on said display device; and communication control means for controlling communications with the host computer, wherein said display control means causes said display device to display transaction indications including a payment indication, and performs on said display device a screen display indicative of a matter that an electronic mail address for transmitting a transaction record is able to be registered, when the electronic mail address is inputted through said input means in association with the screen display indicative of a matter that the electronic mail address is able to be registered, said communication control means transmits the inputted electronic mail address via the communication line to said host computer so that the electronic mail address is registered in association with the transaction information file for customers, in the event that the electronic mail address is registered, when a transaction is performed through an operation of said input means in accordance with the transaction

indications, said display control means performs on said display device a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the registered electronic mail address or an electronic mail address other than the registered electronic mail address, and when a selection operation that the transaction record is to be transmitted to an electronic mail address other than the registered electronic mail address is made through said input means, said display control means performs on said display device a screen display in which a new destination electronic mail address for the transaction record is able to be inputted through said input means. This feature makes it possible to transmit the transaction records to an electronic mail address other than the registered electronic mail address.

In the consumer transaction facility as mentioned above, it is acceptable that when said display control means performs on said display device a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the registered electronic mail address or an electronic mail address other than the registered electronic mail address, said display control means

performs a screen display in which it is selectable through said input means as to whether the transaction record is to be issued in form of a sheet. This feature makes it possible to prohibit the transaction records from being issued in the form of a sheet in accordance with a user's will.

Further in the consumer transaction facility as mentioned above, it is acceptable that said display control means performs on said display device a screen display in which a number of transaction records including a new transaction record and past transaction records is able to be inputted through said input means. This feature makes it possible for the user to know one's past transaction records.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram of a system to which an embodiment of the present invention is applied;

Fig. 2 is a perspective view of a consumer transaction facility according to this embodiment of the present invention;

Fig. 3 is a flowchart (1/3) useful for understanding an operation of this embodiment of the present invention;

Fig. 4 is a flowchart (2/3) useful for

understanding an operation of this embodiment of the present invention:

- Fig. 5 is a flowchart (3/3) useful for understanding an operation of this embodiment of the present invention;
- Fig. 6 is a diagrammatic view useful for understanding an initial screen;
- Fig. 7 is a diagrammatic view useful for understanding an input screen for one's personal identification number;
- Fig. 8 is a diagrammatic view useful for understanding an input screen for an electronic mail address;
- $\label{eq:fig:prop:standing} Fig. \ 9 \ is \ a \ diagrammatic view useful for \\ \\ understanding \ a \ screen \ after \ an \ input \ of \ an \ electronic \\ \\ \text{mail address;}$
- Fig. 10 is a diagrammatic view useful for understanding an alternative initial screen;
- Fig. 11 is diagrammatic view useful for understanding a screen for selection between an issue and a transmission of transaction records;
- Fig. 12 is diagrammatic view useful for understanding a screen for a designation of a new transmission destination:
 - Fig. 13 is diagrammatic view useful for

understanding an example of a final display screen on a consumer transaction facility; and

Fig. 14 is a diagrammatic view useful for understanding an example of a display of transaction records on a terminal.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Hereinafter, an embodiment of the present invention will be described in conjunction with the accompanying drawings.

Fig. 1 shows a structure of a consumer transaction system 10 to which an embodiment of the present invention is applied.

The consumer transaction system 10 comprises basically a host computer 12 equipped in a bank and the like, a plurality of consumer transaction facilities 16 connected via a communication line 14 to the host computer 12, and a plurality of personal computers (hereinafter, referred to as terminals) 18 connected via the communication line 14 to the host computer 12. The personal computers serve as customer terminals.

In the present embodiment, it is assumed that the consumer transaction facilities 16 are applied to an automatic teller machine (ATM), which is capable of performing banking services such as depositing money

in a bank and drawing one's money from the bank. It is noted, however, that the consumer transaction facilities 16 are also applicable to a cash dispenser (CD).

The host computer 12 for performing banking services has a data base 20 which stores therein a customer information file (a transaction information file for customers) 21 and a consumer transaction terminal information file. The customer information file 21 stores therein transaction records of a customer in the form of data, an electronic mail address registered in association with the transaction records of the customer, etc.

In the present embodiment, it is assumed that each of the terminals 18 has an electronic mail address of the associated customer.

Fig. 2 is a perspective view of the consumer transaction facility 16 according to this embodiment of the present invention. The consumer transaction facility 16 has a main frame 36 which is provided with, as an interface with a customer, a card insertion/receipt/card discharge aperture (simply referred to as a card insertion and discharge aperture too) 40 through which a card 37 on which account information is recorded is inserted and discharged, and

a receipt (paper receipt) 38 is discharged in the form of a sheet (paper or a sheet made of synthetic resin and the like) on which transaction contents are recorded, a bankbook insertion and discharge aperture 42 through which a bankbook 41 is inserted and discharged, a paper money entry and discharge aperture 44 serving as an entry for a paper money 43 for depositing or a discharge outlet for a paper money 43 for payment, and a display device 46 serving both as a display unit and an customer operating unit through which an customer performs an operation for input processing and the like in accordance with a displayed guidance.

In this case, the display device 46 has an input unit (input means) 48 serving as a so-called touch panel and a screen (image plane) 47 on which images and the like are displayed. The input unit 48 makes it possible to input an electronic mail address in accordance with a display on the screen 47, as will be described latter.

In Fig. 1, each of the consumer transaction facilities 16 has a control unit (referred to as a transaction service control unit too) 50 for controlling the consumer transaction facility 16 in its entirety including transaction services. Connected to the control unit 50 are a communication control unit 51 one end of which is connected to the communication

line 14, a card processing unit 52, a bankbook processing unit 54, a paper money supply storage unit 56, and a display and input control unit 58 serving as display control means and input control means.

The card processing unit 52 has a function of reading information such as an account number and the like recorded on the card 37 inserted by a customer to print on the receipt 38 contents of transactions performed by the consumer transaction facility 16 into issue

The bankbook processing unit 54 has a function of printing transaction contents on the bankbook 41 inserted by the customer.

The paper money supply storage unit 56 performs a supply of the paper money 43 for payment and a storage of the deposited paper money 43 in accordance with an instruction of the control unit 50.

Next, the operation of the above-mentioned α embodiment will be described with reference to Figs. 3, 4 and 5.

When a customer as a user reaches the front of the consumer transaction facility 16, an initial screen 62 as a transaction screen shown in Fig. 6 is displayed on an image plane 47 of the display device 46 (step S1).

As seen from Fig. 6, the initial screen 62

comprises a depositing button 53, a payment button 55, a transfer button 57, a balance inquiry button 59, and an electronic mail address registration button 60 peculiar to the present embodiment, those buttons being service buttons and representative of transaction items.

When the electronic mail address registration button 60 is depressed (step S2), the display is reversed (a reversed display for indication of the depression), and such a message that "please insert your card and input your personal identification number" is generated by a speech sound of a speaker and the like and/or a screen display, and then the image plane 47 is changed to an input screen 63 for a personal identification number shown in Fig. 7 (step S3).

In this case, the customer as the user inserts the card 37 through the card insertion and discharge aperture 40 and inputs one's personal identification number of four digits through the input screen 63 for a personal identification number.

In this way, the customer is identified (step S4) in a similar fashion to that of the conventional services. That is, when the card 37 is inserted through the card insertion and discharge aperture 40, the card processing unit 52 reads the account number and the like

and transmits the same in the form of data to the control 50. When the personal identification number of the customer is inputted through the input unit 48, it is transmitted in the form of data from the display and input control unit 58 to the control unit 50.

At that time, the control unit 50 communicates via the communication control unit 51 and the communication line 14 with the host computer 12. The host computer 12 retrievals the customer information file 21 of the data base 20 to determine an identity of the customer on the basis of the account number and the personal identification number and informs of the determination result the control unit 50 via the communication line 14 and the communication control unit 51. In the event that the control unit 50 receives the determination result indicative of the matter that the customer is not proper, the display returns to the input screen 63 for a personal identification number or the initial screen 62 together with a display and/or a speech sound informing of the matter that the personal identification number is not proper (step S4: NO).

On the other hand, in the event that the control unit 50 receives the determination result indicative of the matter that the customer is proper (step S4: YES), the control unit 50 causes the display and input control

unit 58 serving as the electronic mail input screen control unit to perform the processing in accordance with the determination result.

At that time, first, an electronic mail address input screen 64 shown in Fig. 8 is displayed on the image plane 47 (step S5).

On the electronic mail address input screen 64, there is displayed an electronic mail address input window 66 below the message "destination electronic mail address".

In this condition, an input button 68 is used to input English letters and the like representative of user names, domain names, etc., so that the input processing for electronic mail address is performed (step S6).

In a screen 69 on which the inputted electronic mail address is displayed in a window 66, as shown in Fig. 9, when a confirmation button 70 is depressed (step S7: YES), a setting process for the electronic mail address is performed to set up the electronic mail address in the control unit 50 (step S8). Incidentally, when a cancel button 72 is depressed without depression of the confirmation button 70, it returns to the initial screen 62 shown in Fig. 6 (step S7: NO).

When the electronic mail address in the control

unit 50 is set up, a communication is performed between the consumer transaction facility 16 and the host computer 12, so that the host computer 12 stores the electronic mail address thus set up into the customer information file 21 of the data base 20 in association with the user's account number of the card 37. Thus, the registration or the renewal of the electronic mail address onto the data base 20 is made (step S9). Incidentally, in the event that the registration processing of the electronic mail address involved in the steps S3 to S8 is first performed, a registration processing of the electronic mail address is performed, and in the event that the registration processing of the electronic mail address is performed on and after the second time, a renewal registration processing of the electronic mail address is performed.

At the time when the registration processing of the electronic mail address is terminated, the initial screen 62 shown in Fig. 6 is displayed again (step S1).

Incidentally, in the initial screen 62 after the registration processing of the electronic mail address involved in the steps S1 to S9 has been performed, it is possible to change the display to a screen in which an electronic mail address registration button 60 except buttons 53, 55, 57 and 59 representative of the

transaction items is not displayed, or even if it is depressed, it is unavailable. Fig. 10 shows a display of an initial screen 76 indicative of the matter that the depression of the electronic mail address registration button 60 is unavailable.

In the event that the initial screen 76 is displayed, when any one of the buttons 53, 55, 57 and 59 representative of the transaction items is depressed, the existing service processing screen (not illustrated) is continuously displayed (step S10), and the existing service processing is carried out (step S11).

In the event that the existing service processing is carried out, when the above-mentioned registration processing of the electronic mail address has been performed, the customer identification determination processing by the confirmation of the association relation between the account number and the personal identification number of the card 37 is completed, and thus the entry of an amount of money successive to the entry of the transaction item (any one of depositing, payment, transfer, etc.) causes those datum to be transmitted from the display and input control unit 58 to the control unit 50.

Upon receipt of those datum, the control unit 50

communicates via the communication control unit 51 and the communication line 14 with the host computer 12. The host computer 12 retrievals the customer information file 21 of the data base 20 to determine as to whether the transaction designated by the input data is in an available state, and informs of the determination result the control unit 50 via the communication line 14 and the communication control unit 51.

The control unit 50 executes the transaction processing or displays on the screen 47 of the display device 46 the reason why the transaction processing is not carried out through the display and input control unit 58 in accordance with the determination result.

When the transaction processing involved in the existing service is completed, in other words, under the condition that the confirmation button is finally depressed for the existing service, the control unit 50 initiates the transaction record processing of which contents are shown in detail in Figs. 4 and 5 (step S12: depression of the confirmation button).

At that time, first, as shown in Fig. 11, there is displayed a screen for confirmation as to whether the display and input control unit 58 issues the transaction record in the form of the sheet receipt 38,

and as to whether the display and input control unit 58 transmits the transaction record to the registered electronic mail address (step S13). As seen from Fig. 11, displayed on a screen 76 for transaction record issue confirmation and transaction record transmission confirmation are an issue button 78 and a non-issue button 80 for instructing whether the transaction record is issued in the form of the sheet receipt 38 as in the existing service, and a transmission button 82 and a non-transmission button 84 for instructing whether the transaction record is transmitted to the electronic mail address.

Thus, an input processing for those buttons 78, 80, 82 and 84 is performed (step S14). In this case, when any one of the issue button 78 and the non-issue button 80 involved in the issue of the transaction record is depressed and any one of the transmission button 82 and the non-transmission button 84 involved in the transmission of the transaction record is depressed, the input processing is completed.

Next, a processing is performed in accordance with the input processing. First, it is determined whether the sheet receipt 38 is to be issued (step S15). In the event that an input of instructing the issue of the sheet receipt 38 is made (step S15: presence), the

card processing unit 52 issues the sheet receipt 38 on which transaction contents (referred to as the transaction records too) are printed, and discharges the same together with the card 37 to the card insertion/receipt/card discharge aperture 40 (step S16).

After completion of the receipt issue processing, or in the event that the input of instructing no issue of the sheet receipt 38 is made (step S15: absence), it is determined whether transmission to the electronic mail address is necessary (step S17).

In the event that the input of instruction of necessity for transmission is made (step S17: presence), there is displayed an additional screen 86 for determining the destination and the like as shown in Fig. 12 (step S18). On the additional screen 86, it is indicated on a reverse display basis that the non-issue button 80 and the transmission button 82 are depressed.

At that time, it is determined as to which one is depressed between a registered address button 88 and a new destination designation button 90 for designating anyone of the electronic mail addresses but the registered electronic mail address (step S19).

In the event that the new destination designation button 90 is depressed (step S19: new destination),

there are executed an electronic mail address input screen display processing (step S20) explained with reference to the electronic mail address input screen 64 shown in Fig. 8, an input processing (step S21) for the electronic mail address of the new destination explained with reference to the screen 69 shown in Fig. 9, a button depression determination processing (step S22), and a new destination electronic mail address setting processing (step S23), which correspond to the processings of the above-mentioned steps S3, S4, S5 and S6, respectively.

It is noted that according to the present embodiment, the electronic mail address of the new destination inputted in the processing of the step S21 is treated as an electronic mail address which is effective only in the present transaction, there is not performed a renewal processing for the electronic mail address of the customer information file 21 on the data base 20 of the host computer 12. According to the present embodiment, as mentioned above, there is provided such an arrangement that the renewal processing for the electronic mail address is performed only for the electronic mail address inputted after the electronic mail address registration button 60 is depressed, on the initial screen 62 shown in Fig. 6, in the processing

of the step S6 (cf. Step S9: data base registration/renewal processing).

Next, it is determined whether an only transaction button 92 and a record number input button 94 in the column of the number of transmission records are depressed (step S24). In the event that it is determined that the record number input button 94 is depressed, the number of inputs of the number of records is confirmed (step S25).

Next, a transmission record number processing is carried out (step S26). In this case, the control unit 50 makes the contents to be transmitted in the new transaction in the form of a transmission file. Specifically, in the event that the screen 47 which is finally displayed is a final display screen 96 shown in Fig. 13, since it is designated that the transaction record is transmitted to the new destination address, the control unit 50 makes the new destination electronic mail address and three times of records (the new transaction record and the past two times of transaction records, that is, total three times of records) inputted into a record number input column in the form of the transmission file in association with the account number.

In the state of the final display screen 96 shown

in Fig. 13, when the confirmation button 70 is depressed (step S27), the process goes to a step S28 in which a host communication processing is performed.

In the host communication processing, the above-mentioned transmission file is transmitted from the control unit 50 constituting the consumer transaction facility 16 through the communication control unit 51 and the communication line 14 to the host computer 12. At that time, there is displayed on the screen 47 such a message that "three transaction records have been transmitted to the new destination electronic mail address". Thus, the transaction with the user at the place of setting up the consumer transaction facility 16 is terminated.

The host computer 12 refers to the transmitted transmission file to retrieve the customer information file 21 for the associated customer in view of the account number, and transmits the past three times of transaction record data including the new transaction content to the new destination electronic mail address. Thus, the transaction record data are transmitted on an electronic mail basis to the specified terminal 18 designated by the new destination electronic mail address.

Fig. 14 shows contents of the electronic mail

received by the specified terminal 18 designated by the new destination electronic mail address, that is, the state in which transaction records 98 are displayed on the display of the terminal 18.

The user of the specified terminal 18 will be able to know through the display screen the contents of the transaction records 98, that is, a bank name (A bank), a branch name (B branch) of the bank A, a type of bank accounts (ordinary deposit account), a bank account number (1345678), an account name (Taro Fujitsu), a type of transactions (payment), an amount of money of transactions (10,000 dollars), and the balance (5,000 dollars). It is acceptable that the contents of the transaction records 98 may include date of transactions and service charges.

From the screen display of Fig. 14, it will be understood that the user has received the past three times of transaction records 98 including the new transaction record 98.

For example, in the event that the transaction records 98 are displayed in the form of text data, it is possible to display the transaction records 98 by a wide use of mailer which is a software capable of dealing with an electronic mail. In order to provide a fine display, it is acceptable that the host computer

12 makes documents including the transaction records 98 in the form of an HTML document and the like, and the terminal 18 displays the documents thus generated by the use of a viewer.

Further, it is acceptable that the host computer 12 processes the transaction records 98 into data suitable for a spreadsheet program, and the terminal 18 processes the received data using a spreadsheet software. This makes it possible to manage the transaction records 98 in the form of a so-called electronic account book.

According to the present embodiment mentioned above, it is possible to readily input the destination electronic mail address of the transaction records 98 on the consumer transaction facility 16. This makes it possible to confirm the transaction records, if necessary, a plurality of number of times, on the terminal 18 specified by the electronic mail address. Consequently, it is also possible to attain such an additional effect that a register of a cash-book and the like operative on the terminal 18 through which the transaction records 98 can be confirmed is readily performed.

Further, according to the present embodiment, it is possible to prohibit the transaction records 98 from

being issued in the form of the sheet receipt 38 in accordance with an intention of the user of the consumer transaction facility 16, and thereby saving a resource.

Furthermore, according to the present embodiment, since an electronic mail address is registered, it is possible to utilize the existing infrastructure such as an internet and the like.

Still furthermore, according to the present embodiment, since it is also possible to transmit the destination address of the transaction record to a destination address other than the registered destination address, it is possible to confirm the transaction record on the terminal 18 for example, other than the terminal 18 which is usually used by the user.

As mentioned above, according to the present invention, it is possible to readily input through a consumer transaction facility a transaction record destination address for transmitting transaction contents performed through a consumer transaction facility, and whereby it is possible to expect such an effect that the transaction contents can be confirmed through a terminal and the like which is designated by the transaction record destination address. Since the transaction contents can be confirmed through a

terminal and the like, it is possible to store and manage the transaction contents in the form of data in the terminal and the like.

Further, according to the present invention, there is provided on a screen of the display device of the consumer transaction facility an indication as to whether the transaction record is to be issued in the form of sheet receipt. Thus, for example, in the event that it is selected that the transaction record is not to be issued, it is possible to reduce the use of sheets as the resource.

Furthermore, according to the present invention, since it is also possible to transmit the destination address of the transaction record to a destination address other than the registered destination address, it is possible to confirm the transaction record on the terminal other than the terminal which is usually used at home by the user.

While the present invention has been described with reference to the particular illustrative embodiments, it is not to be restricted by those embodiments but only by the appended claims. It is to be appreciated that those skilled in the art can change or modify the embodiments without departing from the scope and sprit of the present invention.

WHAT IS CLAIMED IS:

1. A consumer transaction facility for communicating with a host computer having a transaction information file for customers via a communication line in accordance with an operation of a customer to perform a customer's desired transaction, said consumer transaction facility comprising:

a display device;

display control means for controlling a display on said display device; and

input means for performing an input operation in accordance with a display on said display device,

wherein said display control means performs on said display device a screen display in which a destination electronic mail address for transaction record of a custom is able to be inputted through said input means, a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the destination electronic mail address, and a screen display in which it is selectable through said input means as to whether the transaction record is to be issued in form of a sheet.

2. A consumer transaction facility according to claim 1, wherein said display control means performs on said display device a screen display in which a number of transaction records including a new transaction record and past transaction records is able to be inputted through said input means.

- 3. A consumer transaction facility for communicating with a host computer having a transaction information file for customers via a communication line in accordance with an operation of a customer to perform a customer's desired transaction, said consumer transaction facility comprising:
- a display device; display control means for controlling a display on said display device; input means for performing an input operation in accordance with a display on said display device; and communication control means for controlling communications with the host computer,

wherein said display control means causes said display device to display transaction indications including a payment indication, and performs on said display device a screen display indicative of a matter that an electronic mail address for transmitting a transaction record is able to be registered,

when the electronic mail address is inputted through said input means in association with the screen display indicative of a matter that the electronic mail address is able to be registered, said communication

control means transmits the inputted electronic mail address via the communication line to said host computer so that the electronic mail address is registered in association with the transaction information file for customers.

in the event that the electronic mail address is registered, when a transaction is performed through an operation of said input means in accordance with the transaction indications, said display control means performs on said display device a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the registered electronic mail address or an electronic mail address other than the registered electronic mail address, and

when a selection operation that the transaction record is to be transmitted to an electronic mail address other than the registered electronic mail address is made through said input means, said display control means performs on said display device a screen display in which a new destination electronic mail address for the transaction record is able to be inputted through said input means.

4. A consumer transaction facility according to claim 3, wherein when said display control means performs on said display device a screen display in which it is selectable through said input means as to whether the transaction record is to be transmitted to the registered electronic mail address or an electronic mail address other than the registered electronic mail address, said display control means performs a screen display in which it is selectable through said input means as to whether the transaction record is to be issued in form of a sheet.

- 5. A consumer transaction facility according to claim 3, wherein said display control means performs on said display device a screen display in which a number of transaction records including a new transaction record and past transaction records is able to be inputted through said input means.
- 6. A consumer transaction facility according to claim 4, wherein said display control means performs on said display device a screen display in which a number of transaction records including a new transaction record and past transaction records is able to be inputted through said input means.

ABSTRACT OF THE DISCLOSURE

In a consumer transaction facility connected via a communication line 14 to a host computer, a display and input control unit performs on a display device a screen display in which a destination electronic mail address for transaction records is able to be inputted. When the destination electronic mail address for transaction records is inputted through an input unit, the display and input control unit performs a screen display in which it is selectable as to whether the transaction records are to be transmitted, and in addition performs a screen display in which it is selectable as to whether the transaction records are to be issued in the form of a sheet receipt.

20

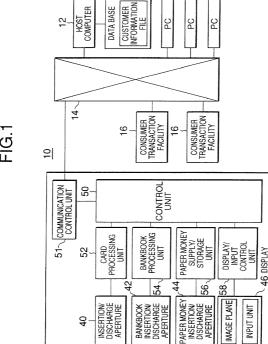
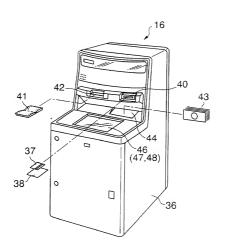


FIG.2



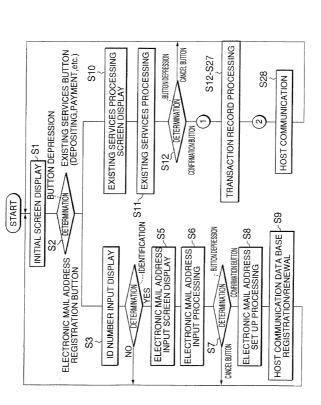


FIG.4

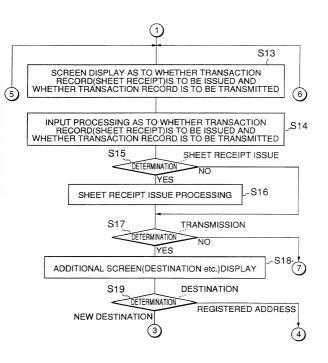


FIG.5

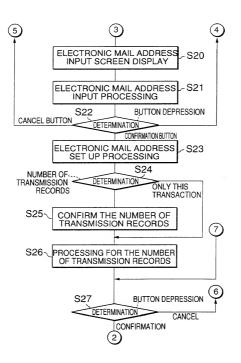


FIG.6

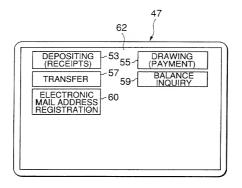


FIG.7

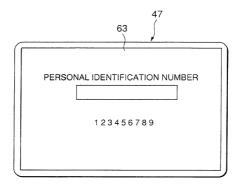


FIG.8

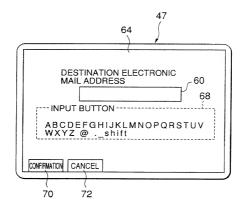


FIG.9

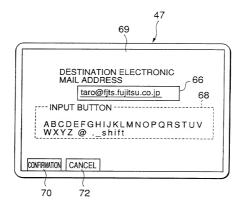


FIG.10

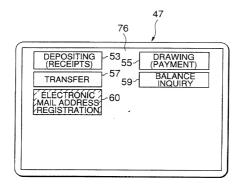


FIG.11

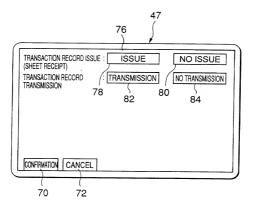


FIG.12

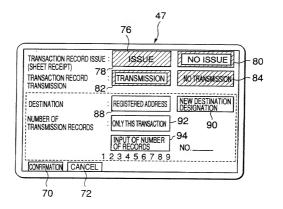


FIG.13

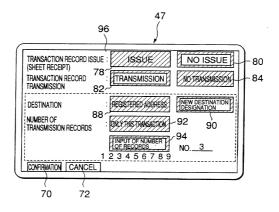
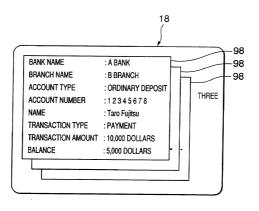


FIG.14



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration 日本語宣言書		
私の住所、私苦茶、国籍は下記の私の氏名の後に記載され た通りです。 :	My residence, post office address and citizenship are as stated next to my name.	
下記の名称の発明に関して請求範囲に記載され、特許出顧 している発明内容について、私が最初かつ唯一の発明者(下 窓の氏名が一つの場合)もしくは最初かつ共同発明者である と「下記の名称が複数の場合」信じています。	I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and	
と (いんからかかがないをおり) 古し(ヤエ)・	for which a patent is sought on the invention entitled CONSUMER TRANSACTION FACILITY	
上記差明の明細書(下記の欄でx申がついていない場合は、 本書に添付)は、	the specification of which is attached hereto unless the following Box is checked:	
	was filed on a United States Application Number or PCT International Application Number and was amended on (if applicable).	
私は、特許請求範囲を含む上記訂正後の明細書を検討し、 付寄を理解していることをここに表明します。	I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.	
私は、運転規則法負募37編第1条56項に定義されると おり、特許資格の有無について重要な償業を関示する義務が あることを認めます。	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.	

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trudemark Office, Washington, DC 20231, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Commissioner of Patents and Trudemarks, Washington, DC 20231. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number,

Japanese Language Declaration (日本語宣言書)

私は、米国法典務35個119条(a)-(d) 項文は365条 (d) 策に基さ予定の、米国以外の国の少なくとも一声国を指定している特許協力条約365(a) 策に基づく国際出版、 は外国での科評出版もしくは契明が確の出版についての外国 接先権をことに非接するともに、任先権を未服している 本出版の前に出版された特許または発明者証の外国出版を以 下に、特殊をマークすることで、元しています。

Prior Foreign Application(s)

14

措 私:、第35編米団法典119条(e)項に基いて下記の米 通 国特許出類規定に記載された権利をここに主張いたします。 調

(Application No.) , (Filing Date) (出類音号) (出類日)

(Application No) (出顧番号)	(Filing Date) (出順日)
(Application No.)	(Filing Date)
(出願益号)	(出版目)

私は、私自身の知識に基ずいて本宣言書中で私が存みを 明が真実であり、かつ私の入中した確保と私の作じるところに基づく要明が全て真実であると同じていること。さらに故 をになされた虚偽の表明及びそれと同等の行為は米配込典等 18届第1001条に基づき 新企士たは初集。もしくはこ の両方により処罰されること、そしてそのような故意による 確偽の声明を行えば、出場した。又は低に寿命であたを の行功性が失われることを認識し、よってここにト記のごと く重誓を敬しまっ。 I hereby claim foreign priority under Title 25, United States Code, Section 119 (a)-(d) or 355(b) of any foreign application(s) for patent or inventor's certificate, or 355(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

27/May/1998	優先権主張なし	
(Day/Month/Year Filed) (出版年月日)		
(Day/Month/Year Filed) (出版年月日)		

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.) (Filing Date) (出顧音号) (出顧日)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 35(s) of any POT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, it acknowledge the duty to disclose information which is material to patentiability as defined in Title 37, Code of Federal Regulations, Section 1.58 which became available between the filing date of the prior application and the national or PCT International filing date of application.

(Status: Patented, Pending, Abandoned) (现況: 特許許可済、係属中、放棄済)

(Status: Patented, Pending, Abandoned) (現況: 特許許可済、係属中、放棄済)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 15 of the United States Code and that such willful false statements any jeopardize the validity of the application or any patent issued thereson.

Under the Pagerwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Japanese Language Declaration (日本語宣言書)

委託状: 私は下記の発明者として、本出願に関する一切の 手続きを米券并結構局に対して遂行する弁理士または代理人 として、下記の者を指名いたします。(弁護士・または代理 一氏名及び野登録号を明和のこと) POWER OF ATTORNEY: As a named inventor. I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

James D. Halsey, Jr., 22,729; Harry John Staas, 22,019; David M. Pitcher, 25,908; John C. Garvey, 28,907; J. Randall Beckers, 30,538; William F. Herber, 31,028; Richard A. Göllhöfer, 31,108; Mark J. Henry, 36,152; Gene M. Garner II, 34,472; Michael D. Stein, 37,240; Paul I. Kravetz, 35,230; Gerald P. Joyce, III, 37,648; Todd E. Marlette, 35,269; Harlan B. Williams, Jr., 34,756; George N. Stevens, 36,938; Michael C. Soldoner, P-41,458 and William M. Schertler, 35,248 (agent)

蓄類送付先 Send Correspondence to:

STAAS & HALSEY 700 Eleventh Street, N.W. Suite 500 Washington, D.C. 20001

直接電話運絡先 (名前及び電話番号)

100

(20

ること)

Direct Telephone Calls to: (name and telephone number)

STAAS & HALSEY (202) 434-1500

唯一または第一発明者	**	Full name of sole or first inventor Hiroyuki Kosuda
発明者の署名	月付 .	Inventor's signature Jantitary 27, 199 Hirawki Kasuda
住所		Residence / Maebashi, Japan
国 膏		Citizenship JAPANESE
私告和		Post Office Address C/O FUJITSU TERMINAL SYSTEMS LIMITE
		8-3,Tonya-machi l-chome,Maebashi-sh Gunma-ken,371-0855 JAPAN
第二共同発明者		Full name of second joint inventor, if any Hideyuki Takahashi
第二共同発明者	日付	Second inventor's signature Date (Hide york i Takahashi January 27,19
住所		Residence Maebashi, Japan
国務		Attenship JAPANESE
私書名		Post Office Address. C/O FUJITSU TERMINAL SYSTEMS LIMITED
		8-3,Tonya-machi 1-chome, Maebashi-sh Gunma-ken, 371-0855 JAPAN

joint inventors.)